

IN THE UNITED STATES PATENT OFFICE

In re patent application of:)	
)	
Felix Immanuel Wyss)	Before the Examiner
)	Etienne Pierre LeRoux
Application No. 09/931,209)	
)	Group Art Unit 2171
Filed: August 16, 2001)	
)	May 12, 2004
KNOWLEDGE-BASE SYSTEM)	
AND METHOD)	

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the Notice of Appeal received by the United States Patent Office on 15 April 2004 in connection with the above-indicated application, an Appeal Brief according to 37 CFR 1.192 is provided in triplicate with a check in the amount of the requisite fee of \$165 for a small entity. A request for a one-month extension of time along with the requisite fee have been enclosed with this Response. The Commissioner is authorized to grant any further extensions of time, and charge any deficiency or credit any overpayment to Deposit Account No. 23-3030, but not to include issue fees.

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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Cheryl Kalugyer

Signature of person mailing paper or fee: Cheryl Kalugyer

I. REAL PARTY IN INTEREST

Per 37 CFR §1.192(c)(1), Interactive Intelligence, Inc. (I3) is the owner of the present application by written assignment recorded at reel/frame number 012101/0699.

II. RELATED APPEALS AND INTERFERENCES

Per 37 CFR §1.192(c)(2), The applicants, the applicants' legal representative, and the assignee are unaware of any related appeals or interferences which will affect, be directly affected by, or have a bearing on the Appeal Board's decision in the present appeal.

III. STATUS OF CLAIMS

Per 37 CFR §1.192(c)(3), all pending claims 1-11, 17-43 and 45 stand rejected, and are all being appealed on the grounds further explained hereinafter. Claims 1-11, 17-43 and 45 are presented in Appendix A per 37 CFR §1.192(c)(9).

IV. STATUS OF AMENDMENTS

Per 37 CFR §1.192(c)(4), an amendment after the final rejection was submitted on 11 March 2004 in which claim 44 was canceled. In item 7 of the 16 March 2004 Advisory Action, it was not expressly indicated that the cancellation of claim 44 was entered, but based on the status of the claims section in item 7, it is believed that the cancellation of claim 44 was entered.

V. SUMMARY OF INVENTION

Per 37 CFR §1.192(c)(5), the following summarization explains how each of the independent claims reads on one or more embodiments of the present application. In this summarization, all figure designations refer to the present application, and all page and line numbers refer to the corresponding text of the present application. It should be appreciated that the below summaries are to be interpreted as merely nonlimiting examples--it being understood that all other embodiments upon which the claims read are also intended to be covered.

A. Independent Claim 1

Independent claim 1 sets forth a method that reads on several embodiments of the present application. For instance, referring to the embodiment illustrated in FIG. 1, a knowledge-base system (102) has a database (108) that contains answers to questions. Page 10, line 19-page 11, line 2. The knowledge-base system (102) is operatively coupled to a client computer (120). Page 13, lines 11-15. When a message is received from the client computer (120), the knowledge-base system (102) determines if the message from the client computer (120) was a reply to a previously generated message from the knowledge base system (102). FIG. 25; page 33, lines 14-page 34, line 12. If the message is determined to be a reply, the message is forwarded for processing by a representative (stage 2506 in FIG. 25). Page 33, lines 18-20; page 34, lines 9-12.

B. Independent Claim 17

The method of independent claim 17 reads on multiple embodiments depicted in the present application. With reference to the embodiment of FIGS. 1 and 6, a system (102) is configured with a database (108) that includes question-answer sets. Page 14, lines 5-10. The

system (102) receives a query input that includes a word. FIGS. 10 and 11; page 17, line 3-page 18, line 22. The system (102) selects one or more of the question-answer sets by evaluating the presence of the word in answers (606) of the question-answer sets differently than the presence of the word in questions (604) of the question answer sets. Page 18, lines 5-16; page 24, line 20-page 25, line 11. The system (102) provides output based on the selection. FIGS. 12 and 13.

C. Independent Claim 34

The method of independent claim 34 reads on several embodiments described in the present application. For instance, in the embodiment of FIG. 1, a knowledge-base system (102) has a database (108) that contains question-answer sets. Page 10, line 19-page 11, line 2. The knowledge-base system (102) is operatively coupled to a client computer (120). Page 13, lines 11-15. With reference to FIGS. 10 and 11, a question is received from the client computer (120). Page 17, line 14-page 19, line 7. As described from page 24, line 20 through page 25, line 11, the question-answer sets are scored with respect to the question. Based on the scores, threshold limits are determined, and question-answer sets with scores above the threshold limit are selected. Page 25, line 12-page 26, line 13. This method addresses many problems intrinsic in thresholding schemes based upon a fixed score, particularly problems related to choosing an appropriate threshold level.

D. Independent Claim 39

The method of independent claim 39 reads on many embodiments described in the present application. For example, in the embodiment of FIG. 1, a knowledge-base system (102) has a database (108) that contains question-answer sets. Page 10, line 19-page 11, line 2. The

knowledge-base system (102) is operatively coupled to a client computer (120). Page 13, lines 11-15. With reference to stage 2602 in FIG. 26, a question is received from the client computer (120). Page 26, lines 16-17. Based on the question from the client computer (120), one or more candidate answer sets are selected from question-answer sets in the database (108). Page 26, lines 17-19. A reflexive index (answer candidate index) is created (stage 2606 in FIG. 26) that includes the original question from the client computer (120) and at least the candidate answer sets that were selected. Page 26, line 20-page 21, line 1. Each question from the candidate answer sets is scored against the reflexive index, which contains the original question from the client computer (120). Page 27, lines 1-4. Further, the original question from the client computer (120) is scored against the reflexive index. Page 27, lines 1-5. Candidate answer sets with scores that correlate with the score of the original question from the client computer (120) are chosen to answer the question. Page 27, lines 5-7.

E. Independent Claim 41

The system of claim 41 reads on numerous embodiments described in the present application. Referring to the example in FIG. 1, the knowledge-base system (102) is configured to determine whether or not a message from a client computer (120) is a reply to a previously generated message (FIG. 26) and to forward the message to a representative in response to the determination. Page 33, line 14-page 35, line 2. The knowledge-base system (102) is further configured to evaluate question and answer components in the database (108) independently of one another relative to a question. Page 24, line 20-page 25, line 11. A response to the question is provided in accordance with one or more response templates with each having a different format. Page 29, line 16-page 33, line 5; FIG. 27.

VI. ISSUES

Pursuant to 37 CFR § 1.192(c)(6), the following issues are presented in this appeal:

- A. Whether claims 1, 3-6, 8-11, 17, 20, 24, 32-34 and 45 are not anticipated under 35 U.S.C. 102(b) over U.S. Patent No. 5,517,405 to McAndrew et al. (McAndrew '405).
- B. Whether claims 27-30 and 41 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405.
- C. Whether claims 2, 7 and 31 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Publication No. 2003/0005079 to Mittal (Mittal '079).
- D. Whether claims 18, 19 and 25 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Publication No. 2003/0050803 to Marchosky (Marchosky '803).
- E. Whether claims 21 and 22 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,546,383 to Ogawa (Ogawa '383).
- F. Whether claims 23 and 42 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,553,364 to Wu (Wu '364).
- G. Whether claims 26 and 43 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,023,670 to Martino et al. (Martino '670).
- H. Whether claims 35 and 36 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,028,988 to Schultz (Schultz '988).
- I. Whether claims 37-40 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 5,779,549 (Walker '549).

VII. GROUPING OF THE CLAIMS

Per 37 CFR §1.192(c)(7), the claims do not stand or fall together. Claims 1, 3-6, 8-11, 17, 20, 24, 32-34 and 45 were rejected on common grounds under §102 and do not stand or fall together. Each of at least claims 1, 3, 4, 5, 6, 9, 10, 17, 24, 32, 33, and 34 are believed to be separately patentable. Claims 27-30 and 41 were rejected on common grounds under §103 and do not stand or fall together. At least claims 27, 28, 29, 30, and 41 are believed to be separately patentable from the other claims. Claims 2, 7 and 31 were rejected on common grounds under §103 and do not stand or fall together. As a minimum, claims 2, 7 and 31 are thought to be separately patentable. Claims 18, 19 and 25 were rejected on common grounds under §103 and do not stand or fall together. At least claims 18, 19 and 25 are believed to be separately patentable. Claims 21 and 22 were rejected on common grounds under §103 and do not stand or fall together. At least of claims 21 and 22 are believed to be separately patentable. Claims 23 and 42 were rejected on common grounds under §103 and do not stand or fall together. Further, claims 26 and 43 were rejected on common grounds under §103 and do not stand or fall together. Claims 35 and 36 were rejected on common grounds under §103 and do not stand or fall together. At least claim 35 is believed to be separately patentable. Claims 37-40 were rejected on common grounds under §103 and do not stand or fall together. At least claims 37, 38 and 39 are believed to be separately patentable from the other claims

VIII. ARGUMENTS

All rejections are under 35 U.S.C. §102 and §103, for which the following remarks are offered in accordance with 37 CFR §1.192(c)(8)(iv).

A. **Claims 1, 3-6, 8-11, 17, 20, 24, 32-34 and 45 are not anticipated under 35 U.S.C. 102(b) by McAndrew '405.**

1. Independent Claim 1

It is well settled law that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). See, Manual of Patent Examining Procedure (MPEP) §2131. It is not sufficient that the prior art reference disclose all of the elements in isolation. Rather, “[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” Lindemann Maschinefabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984, emphasis added). The Examiner has the burden of presenting a prima facie case of anticipation. In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138-39 (Fed. Cir. 1986); In re Skinner, 2 USPQ2d 1788, 1788-89 (B.P.A.I. 1986).

In the present case, it is submitted that the Examiner has failed to present a prima facie case of anticipation. Specifically, the reference cited by the Examiner, McAndrew '405, fails to disclose all of the features recited in claim 1. For instance, McAndrew '405 fails to disclose “determining the message from the client computer was a reply to a previously generated

message from the knowledge-base system” and “forwarding the message from the client computer to a representative in response to said determining” as is recited in claim 1.

McAndrew ‘405 generally concerns an expert system that is used to manage the healthcare of patients. A user interacts with the expert system in either a structured mode in which questions are presented one at a time or a guided mode in which a complete questionnaire is presented at once. See, McAndrew ‘405, Abstract, col. 8, lines 4-16. Upon entering the information, the system presents the user a recommendation “(i.e., whether or not to approve or ‘certify’ the proposed treatment).” McAndrew ‘405, col. 8, lines 2-3. The user can accept the recommendation or chose to override the recommendation. Id.

Under the “First Examiner Response” section on page 14 of the 11 December 2003 Final Office Action, it was alleged that “[i]n response to the applicant’s arguments that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., forwarding a referral to a reviewer) are not recited in the rejected claims.” To the contrary, it is submitted that page 12, lines 13-17 of the 28 November 2003 response was overlooked, in which it was stated that “McAndrew ‘405 fails to disclose ‘determining the message from the client computer was a reply to a previously generated message from the knowledge-base system’ and ‘forwarding the message from the client computer to a representative in response to said determining’ as is recited in claim 1.” The ensuing discussion of these omitted features was in terms of the language used in McAndrew ‘405 to aid in the understanding the failure of McAndrew ‘405 to disclose such features. For example, the 28 November 2003 response stated at page 13, lines 1-4 that “nowhere does the passage explicitly state that the expert system of McAndrew ‘405 actually forwards a referral to a reviewer” which

one would understand to refer to “forwarding the message from the client computer to a representative” as set forth in claim 1.

While in both Office Actions, it was contended that, column 8, lines 38-49 of McAndrew ‘405 disclosed this feature, a careful reading of the cited passage reveals that nowhere does it expressly state that the expert system of McAndrew ‘405 actually forwards a message to a representative in response to a determination that the message was a reply to a previously generated message from the system. At most, the expert system in McAndrew ‘405 merely makes a recommendation that the case should be referred “to a more experienced reviewer, such as a physician, to make a final decision as to whether the proposed treatment should be certified or not” and it does not actually forward a message. McAndrew ‘405, col. 8, lines 31-34. Furthermore, McAndrew ‘405 fails to disclose such message forwarding in response to determining the received message was a reply to a previously sent message. For this and other reasons, McAndrew ‘405 fails to disclose “forwarding the message from the client computer to a representative in response to said determining.”

Furthermore, McAndrew ‘405 fails to disclose “determining the message from the client computer was a reply to a previously generated message from the knowledge-base system.” In both Office Actions, it was alleged that, column 8, lines 6-16 of McAndrew ‘405 disclosed this feature. However, a careful reading of this passage shows that, in the system of McAndrew ‘405, there is no need for that system to determine whether or not a question was a reply to a previously generated message from the system. Moreover, McAndrew ‘405 even fails to imply such features. Specifically, in McAndrew ‘405, the system is interacting with only a single user at a time and for a continuous period of time. That is, the user’s queries are not interrupted by queries from other users about other things. So, in the McAndrew ‘405 system, there would not

be even a need to determine if a message was a reply to a previously generated message, and thus, the problem addressed with claim 1 simply does not exist in the environment envisioned by McAndrew '405. For this and other reasons, McAndrew '405 fails to disclose or even suggest "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system" as is recited in claim 1.

Since McAndrew '405 fails to disclose "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system" and "forwarding the message from the client computer to a representative in response to said determining" as recited in claim 1, it does not anticipate claim 1. It therefore is submitted that independent claim 1 and its dependent claims are allowable over the references of record.

a. Dependent Claims 3 and 4

In addition to the reasons given above as to the allowability of independent claim 1, other reasons support the allowance of its dependent claims. For example, McAndrew '405 fails to disclose "enclosing a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number" as recited in dependent claim 3 (emphasis added). As mentioned above, a message identification number is attached to a message in one embodiment so that the knowledge-base system is able to determine whether or not a received message is a reply to a message that was previously sent from the knowledge-base system. The passage cited in the rejection of claim 3 (McAndrew '405, col. 6, lines 47-58) is silent with respect to enclosing a message identification number on a communication, such as a message, and further, it is silent as to determining that a message was a reply by searching the

message for the message identification number. Thus, McAndrew '405 fails to disclose the recited features in as complete detail as contained in claim 3, and as a result, fails to anticipate dependent claim 3 and its dependent claim 4.

b. Dependent Claim 5

In another example, McAndrew '405 fails to disclose all of the features recited in dependent claim 5 such as “wherein said determining includes ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.” Contrary to both Office Actions, column 6, lines 47-58 of McAndrew '405 neglects to disclose such a feature. On page 3 of the 11 December 2003 Final Office Action, it was asserted that “McAndrew '405 discloses a communication log [col 6, lines 47-58].” McAndrew '405 merely mentions “that the problem solving system will have a history of prior transactions concerning the case currently under consideration.” col. 6, lines 56-58. However, even assuming for the sake of argument that McAndrew '405 discloses a “communication log” as alleged, nowhere does McAndrew '405 state that a message is determined to be a reply based on ascertaining whether a reply detection limit was exceeded. Nothing in McAndrew '405 even suggests utilizing a reply detection limit. For this and other reasons, dependent claim 5 is not anticipated by McAndrew '405.

c. Dependent Claim 6

In addition to the above-mentioned features for claim 5, McAndrew '405 further fails to disclose “wherein the reply detection limit includes a communication interval limit of time intervals between successive communications with the client computer and a number of

communications limits based on a number of communications with the client computer” as recited in dependent claim 6. The cited passage of McAndrew ‘405, column 6, lines 47-58, lacks any disclosure to this effect. Thus, claim 6 is not anticipated by McAndrew ‘405.

d. Dependent Claim 9

As another example, McAndrew ‘405 fails to disclose all of the features recited in dependent claim 9 such as “wherein said determining includes searching the message from the client computer for the message identification number and ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.” As noted above, McAndrew ‘405 does not disclose, suggest, or teach the use of message identification numbers and reply detection limits, and consequently, McAndrew ‘405 fails to anticipate claim 9 for at least these reasons.

e. Dependent Claim 10

McAndrew ‘405 likewise fails to anticipate dependent claim 10 because it fails to disclose that “the representative is a human being.” As mentioned before, the expert system in McAndrew ‘405 merely makes a recommendation of a referral and does not actually forward a message to a human being when it is determined that the message is a reply. At least for the above-mentioned reasons, McAndrew ‘405 fails to anticipate claim 10.

2. Independent Claim 17

McAndrew ‘405 also fails to disclose all of the features recited in claim 17. For instance, McAndrew ‘405 fails to disclose “receiving a query input to the system, the query input

including a word” and “selecting one or more of the question-answer sets with the system in response to the query input by evaluating presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question-answer sets” as recited in claim 17.

It should be appreciated that claim 17 concerns a technique for selecting question-answer sets in response to a query input that includes a word. In particular, the presence of a word in answers of question-answer sets is evaluated differently from the presence of the word in questions of the question-answer sets. Because under certain circumstances the words in questions may generate more or less accurate results than those contained in the answers, it is desirable to grade question words differently than answer words in some embodiments. In other circumstances where the words in answers may generate more or less accurate results than those contained in the questions, it is desirable to grade question words differently than answer words. Referring to FIG. 10 of the present application, when asking a question a client can specify that questions and answers be graded differently during the selection stage. As shown, the screen (100) in FIG. 10 has a question weight field (1010) and an answer weight field (1012) to enter these different weighting factors. An additional relative weight field (1014) is included to define a proportional relationship between the question and answers during querying. Page 18, lines 5-16. Based on the weighting, the system (102) selects one or more question-answer sets by evaluating presence of the query input’s word in answers of the question-answer sets differently than the presence of the query input’s word in questions of the question-answer sets. Page 24, line 20-page 25, line 11. By grading questions and answers differently, the accuracy of the automatically generated answers to questions often improves.

To support the rejection of independent claim 17, it was alleged in both Office Actions that column 10, lines 23-27 of McAndrew '405 discloses that "question and answers are evaluated differently":

The inference engine uses the answers to the questions, as indicated via dashed arrow 82, to generate additional questions for display to the user. In this manner, a complete questionnaire is dynamically built and answered to enable the inference engine to make a recommendation as to the acceptability of the proposed treatment.

Nowhere does McAndrew '405, especially in the above-cited passage, expressly mention that the presence of a word in questions and answers of question-answer sets are evaluated differently during selection of one or more of the question-answer sets. Moreover, this passage fails to explain how the additional questions are generated.

In fact, the cited passage of McAndrew '405 concerns a "structured interaction" in which additional questions are selected based on rules contained within the system. Referring to column 10, lines 7-27, the McAndrew '405 system questions are presented to the user one at a time, after each time the user answers the question. It is proposed that the McAndrew '405 system uses a rules based technique in which neither questions nor answers of question-answer sets are evaluated for the presence of a word. Rather, a "structured interaction" can be used in which "individual questions relevant to the problem are presented by the inference engine as indicated at box 72 based on rules contained in the database." McAndrew '405, col. 10, lines 9-11 (emphasis added). "The structured model provides formatted questions with branching logic tables and/or an array that will lead the user to a set decision based on the answers to the questions presented." McAndrew '405, col. 3, lines 9-12. Even with a "guided model" McAndrew '405 fails to mention that questions and answers in question-answer sets are evaluated differently. Rather, it just as likely can be inferred that both questions and answers are

evaluated the same in the “guided model.” Since McAndrew ‘405 fails to disclose “receiving a query input to the system, the query input including a word” and “selecting one or more of the question-answer sets with the system in response to the query input by evaluating presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question-answer sets”, claim 17 is not anticipated. For at least these reasons, it is believed that independent claim 17 and its corresponding dependent claims are allowable over the references of record.

a. Dependent Claim 24

In addition to the reasons given above as to the allowability of independent claim 17, other reasons support the allowance of its dependent claims. For instance, McAndrew ‘405 fails to disclose “alerting a representative when a particular one of the question-answer sets is included in the output” as set forth in dependent claim 24. As should be recognized from the previous discussion, McAndrew ‘405 does not alert a representative in any manner, let alone when a particular question-answer set is outputted. Thus, among this and other reasons, McAndrew ‘405 fails to anticipate claim 24.

b. Dependent Claim 32

In another example, McAndrew ‘405 fails to disclose all of the features set forth in claim 32 such as “determining the message from the client computer was a reply to a previously generated message from the system; and forwarding the message from the client computer to a representative in response to said determining.” McAndrew ‘405, as mentioned before, does not forward messages to a representative when it is determined that the message is a reply. At most,

the expert system in McAndrew '405 makes a recommendation for a referral. As a result, McAndrew '405 does not anticipate dependent claim 32.

c. Dependent Claim 33

In addition to the above mentioned features of claims 17 and 32, McAndrew' 405 fails to describe "creating a response message based on the message from the client computer, at least one of a number of response templates and the selected one or more sets, the system being configured to store the response templates each providing a different response format" as in claim 33. Nowhere does McAndrew '405 mention response templates that have different response formats. At least for this reason, dependent claim 33 is not anticipated by McAndrew '405.

3. Independent Claim 34

McAndrew '405 fails to disclose a number of features of claim 34 such as "scoring the question-answer sets with respect to the question; determining a threshold limit based upon said scoring; and selecting the question-answer sets with scores above the threshold limit." On page 16 of the 11 December 2004 Final Office Action, it was alleged without further explanation that the "disclosure by McAndrew '405 column 8, lines 17-26 reads on the claimed threshold limit." No explanation was given as to what specifically in this passage corresponds to the recited threshold limit. First, this passage fails to even mention that question-answers sets are scored with respect to a question that was received. Second, McAndrew '405 fails to disclose that a threshold limit is determined based upon the scoring of the question-answer sets. The policy coverage in McAndrew '405 is a static value stored in database 42 (insurance information 48)

with no disclosure, suggestion, or teaching of scoring question-answer sets. Because McAndrew '405 fails to disclose such features, independent claim 34 and its dependent claims are allowable over the references of record.

B. Claims 27-30 and 41 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405.

1. Independent Claim 41

In addition to the features of independent claim 1 missing from McAndrew '405, there are other reasons why dependent claims 27-30 are nonobvious over McAndrew.

The seminal case directed to application of 35 USC §103 is Graham v. John Deere, 383 U.S. 1; 148 USPQ 459 (1966). From this case, four familiar factual inquiries have resulted. The first three are directed to the evaluation of prior art relative to the claims at issue, and the last is directed to evaluating evidence of secondary considerations. See, MPEP §2141.

From these inquiries, the initial burden is on the Examiner to establish a *prima facie* case of obviousness for which three basic criteria must be met. "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP §2142 (citing, In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). The suggestion/motivation to combine or modify under §103 needs to be specific. Where a "statement is of a type that gives only general guidance and is not specific as to the particular form of the claimed invention and how to achieve

it ... [s]uch a suggestion may make an approach 'obvious to try' but it does not make the invention obvious." Ex parte Obukowicz, 27 USPQ2d 1063, 1065 (U.S. Pat. and Trademark Off. Bd. of Pat. App. & Interferences 1993) (citations omitted). "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." MPEP §2141.02 (citing, W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540; 220 USPQ 303 (Fed. Cir. 1983)).

McAndrew '405 as modified in the §103 rejection still fails to disclose, teach, or suggest several features of claim 41. For example, McAndrew '405 fails to disclose "means for determining a message from a client computer was a reply to a previously generated message from a FAQ database and forwarding the message to a representative in response." As should be appreciated, this feature is recited in terms of means-plus-function language, and therefore, is entitled to be interpreted under 35 U.S.C. §112, sixth paragraph. See, MPEP §2181. It is well-settled law that a claim element stated in a means-plus-function format cannot be met by an element in a prior art reference that performs a different function. See, Transclean Corp. v. Bridgewood Services, Inc., 290 F.3d 1364, 1372, 62 USPQ2d 1865 (Fed. Cir. 2002) ("[T]he anticipatory reference must disclose the recited function identically"); RCA Corp. v. Applied Data Sys., 730 F.2d 1440, 221 USPQ 385 (Fed. Cir. 1984), cert. dismissed, 468 U.S. 1228 (1984); MPEP §2183. In the present circumstances, McAndrew '405 fails to disclose the above-mentioned feature, because McAndrew '405 fails to disclose any structure that performs the identical function of this feature of claim 41. Specifically, the expert system in McAndrew '405 does not forward a message to a representative when it is determined that the message was a reply to a previously generated message from the system.

Moreover, McAndrew '405 fails to disclose "means for evaluating question components and answer components of the FAQ database independently relative to an input query" because it does not disclose any structure that performs an identical function. As discussed above, McAndrew '405 fails to expressly disclose that questions and answers are evaluated independently from one another in its expert system. Rather, the expert system in McAndrew '405 presents questions based on rules contained in the database. See, McAndrew '405, col. 10, lines 9-11. Since the cited references fail to disclose "means for determining a message from a client computer was a reply to a previously generated message from a FAQ database and forwarding the message to a representative in response" and "means for evaluating question components and answer components of the FAQ database independently relative to an input query", claim 41 and its dependent claims are in condition for allowance.

This rejection further relies on Official Notice that is improper with respect to independent 41. As a result, the applicants request documentary evidence because what the Examiner alleges to be common knowledge is in fact not common knowledge. "It is never appropriate to rely solely on 'common knowledge' in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based." MPEP §2144.03 A (citations omitted). Moreover, "[a]ny rejection based on assertions that a fact is well-known or is common knowledge in the art without documentary evidence to support the examiner's conclusion should be judiciously applied." MPEP §2144.03. Further, "[i]t would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known." MPEP §2144.03 A (emphasis in original).

In the present case, the Examiner's allegations are incapable of being instantly and unquestionably demonstrated. Without providing a clear and unmistakable technical line of reasoning underlying the decision to take Official Notice, both Office Actions in item 4 concluded that "Official Notice is taken that means for providing a response to the FAQ database query in accordance with one or more response templates, the response templates each relating to a different response format is well-known and expected in the art." Providing yet another conclusionary statement, the Office Action recites in item 4 that the "ordinary skilled artisan would have been motivated to modify McAndrew to include the above elements for the purpose of providing an output display that is attractive and easily understandable." Notably, this statement is directed to motivation of the modification-- lacking any cogent technical line of reasoning as to why the above-mentioned feature is well-known.

The applicants traversed the use of Official Notice in the both responses to the Office Action by questioning the facts surrounding what the Examiner considered to be common knowledge, and the applicants expressly requested that documentary evidence be provided. Instead of supplying the requested references, it was maintained on page 18 of the 11 December 2003 Office Action "that a FAQ database is well-known and expected in the art." Again, this contention on page 18 still fails to provide any reasoning how the recited features, in particular the response templates, are unquestionably well known in the art and why the traversal was inadequate. As stated at §2144.03 of the MPEP, "[i]f the traverse was inadequate, the examiner should include an explanation as to why it was inadequate."

Again, the taking of Official Notice for independent claim 41 was not made to merely fill gaps that are of insubstantial in nature, and if such a feature were as well known as alleged, it

should not take great effort to locate a reference that supports this contention. Therefore, it was improper to solely rely on Official Notice to reject independent claim 41.

2. Dependent claims 27-30

a. Dependent Claim 27

Claim 27 is not obvious in view McAndrew '405 because impermissible hindsight was used to provide the motivation to arrive at the features of dependent claim 27. On page 5 of the Final Office Action, it was admitted that "McAndrew '405 does not disclose designating one of the question-answer sets to always/never appear in the output for the query input." Nevertheless, without citing any specific passage of McAndrew '405 or other support, it was alleged on page 5 that "[t]he ordinarily skilled artisan would have been motivated to modify McAndrew '405 for the purpose of including a patient's name, age sex etc[.] in the output." This is clearly the case of hindsight being used, in which the present application was used as a road map to provide the motivation to arrive at the recited features. Moreover, the cited passage in the Office Action is defective, because on its face, it fails to consider whether the motivation was present at the time of invention.

b. Dependent Claim 28

It further should be recognized from the previous discussion that impermissible hindsight was again used to reject dependent claim 28. Nowhere is there evidence, but for the present application, that "[t]he ordinarily skilled artisan would have been motivated to modify McAndrew '405 to never include output for the purpose of confidentiality" (page 5 of Final

Office Action) at the time the invention was made. Thus, at least for this reason, dependent claim 28 is nonobvious in view of McAndrew '405.

c. Dependent Claim 29

The rejection of dependent claim 29 was improper because no rationale was given to provide the proper motivation to modify McAndrew '405 for "proportionally weighting one of the question-answer sets to reduce likelihood of appearing in the output for the query input." Further, the only possible motivation, if even given, would be through impermissible hindsight.

d. Dependent Claim 30

Likewise, the rejection of dependent claim 30 was improper because no proper motivation was provided that particularly addressed the features recited in claim 30. As a result, claim 30 is allowable over the references of record.

C. Claims 2, 7 and 31 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Publication No. 2003/0005079 to Mittal (Mittal '079).

The flaws of McAndrew '405 undermine the propriety of the rejection of claims 2, 7 and 31 because of its underlying dependence on McAndrew '405. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 2, 7 and 31 are likewise patentable. Besides these grounds, additional reasons separately support patentability of claims 2, 7 and 31.

1. Dependent Claim 2

McAndrew '405 as modified by Mittal '079 still fails to disclose, teach, or suggest several features of claim 2, such as “the message from the client computer is an email.” On page 6 of the Final Office Action, it was admitted that “McAndrew '405 does not disclose e-mail,” but it was asserted that “Mittal '079 discloses e-mail [paragraph 0044].” However, Mittal '079 only describes (in one sentence) the e-mail in terms of the client receiving software updates via e-mail and not in terms of Mittal '079's knowledge base receiving e-mails. “Such updates may be delivered to a client via push technology such as e-mail, or offered to the client in the form of an interactive update button.” Mittal '079, paragraph 0044. This is exactly opposite of the features recited in dependent claim 2. Additionally, the motivation provided on page 5 of the Final Office Action, “[t]he ordinarily skilled artisan would have been motivated to modify McAndrew for the purpose of providing a client with updates while on-line”, still does not address the situation of the message from the client being an email. Since the cited reference in combination fail to disclose or suggest all of the recited features, dependent claim 2 is allowable.

2. Dependent Claim 7

In addition to the reasons give above for base claims 1 and 5, dependent claim 7 is also allowable because the cited references, even if combined, fail to disclose all of features of claim 7. Mittal '079 fails to even mention a communication log, and in particular, both cited references fail to disclose or teach “the communications maintained in the communication log include email communications, web chatting communications, telephone conversations, and personal conversations” as set forth in claim 7.

3. Dependent Claim 31

The combination of McAndrew '405 and Mittal '079 fails to disclose or suggest a number of the features of claim 31, such as "adding a question-answer set to the database by email." As mentioned before, Mittal '079 merely teaches updating software on the client via email, and fails to specifically mention adding question-answer sets to a database via email. For this as well as other reasons, dependent claim 31 is allowable over the references of record.

D. Claims 18, 19 and 25 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Publication No. 2003/0050803 to Marchosky (Marchosky '803).

The defects of McAndrew '405 undercut the propriety of the rejection of claims 18, 19 and 25 because of its underlying dependence on McAndrew '405. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 18, 19 and 25 are likewise patentable. Besides these grounds, additional reasons separately support patentability of claims 18, 19 and 25.

1. Dependent Claims 18

In item 7 of both Office Actions, claim 18 was "rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew '405 in view of Pub No US 2003/0050803 to Marchosky (hereafter Marchosky '803)." In traversal, it is submitted that both McAndrew '405 and Marchosky '803 fail to collectively or separately disclose "wherein said evaluating includes weighting the answers more than the questions" as recited in claim 18. In item 7 of both Office Actions, it was admitted that "McAndrew '405 does not disclose weighting the answers more than the questions" and therefore, the Examiner relied on Marchosky '803 as disclosing the

missing features. However, Marchosky '803 fails to remedy this missing feature because Marchosky '803 does not disclose the relative weighting of questions to answers (or vice versa), but instead the weighting of questions relative to other questions. Indeed, the system and purpose described in paragraph 14 of Marchosky '803 is very different from the technique recited in claim 18, and it makes no mention of the weighting of answers at all, especially when selecting question-answer sets. Since both McAndrew '405 and Marchosky '803 fail to disclose "wherein said evaluating includes weighting the answers more than the questions" as recited in claim 18, claim 18 is not rendered obvious in view of these references.

2. Dependent Claims 19

Likewise, it should be appreciated that claim 19 is not rendered obvious by the combination of McAndrew '405 and Marchosky '803 because both references fail to disclose "wherein said evaluating includes weighting the answers less than the questions" as recited in claim 19. In item 7 of both Office Actions, it was admitted that "McAndrew '405 does not disclose weighting the answers more [sic.] [less] than the questions." As mentioned before, Marchosky '803 fails to remedy this missing feature because it does not disclose the relative weighting of questions to answers (or vice versa), but instead the weighting of one question relative to other questions. Since together McAndrew '405 and Marchosky '803 fail to disclose all the features as recited in claim 19, claim 19 is not rendered obvious in view of these references.

3. Dependent Claims 25

McAndrew '405 as modified by Marchosky '803 still fails to disclose, teach, or suggest several features of claim 25, such as "said selecting includes scoring each of the questions and the answers using the corresponding weights." As should be appreciated from the previous discussion, Marchosky '803 makes no mention of the weighting of answers at all, especially when selecting question-answer sets. Based on this as well as other reasons, dependent claim 25 is allowable over the references of record.

E. Claims 21 and 22 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,546,383 to Ogawa (Ogawa '383).

The faults of McAndrew '405 undermine the propriety of the §103 rejection of claims 21 and 22 because of its underlying dependence on McAndrew '405. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 21 and 22 are likewise patentable. Besides these grounds, additional reasons separately support patentability of claims 21 and 22.

1. Dependent Claims 21

Dependent claim 21 is allowable over the references of record because even together McAndrew '405 and Ogawa '383 fail to disclose or teach several features of claim 21, such as "said selecting includes scoring a length of one of the questions in proportion to a length of the query input." In the Final Office Action, it was admitted that "McAndrew '405 does not disclose scoring a length of one of the questions in proportion to a length of the query input," but it was contended that claim 15 of Ogawa '383 disclosed such a feature. Contrary to this assertion,

Ogawa '383 does not disclose such a feature. Claim 15 of Ogawa '383 deals with matching character strings. As described in claims 13-15 of Ogawa '383, the strings are broken down into substrings and, when this match a document, the weight of these is proportional to their length. This, however, is different from the idea expressed in claim 21, where the length of the entire query is compared with the length of the entire question field in the entry, and scaling the entry's score based upon this comparison. Note that in Ogawa '383, a substring must first match a substring within the document in its entirety before their scaling takes effect. The recited approach, on the other hand, does not have such a pre-requisite. With the recited approach, entries can be scaled based upon the length of their question field irrespective of whether or not sub-strings of the words in the query matched words in the entry. At least based on the reasons above, claim 21 is allowable over the cited references.

2. Dependent Claims 22

With respect to claim 22, no specific basis or rationale was given for rejecting it under §103, and therefore, a prima facie case of obviousness has not been established. The only passage of Ogawa '383 cited under the section for claims 21 and 22 was claim 15 of Ogawa '383, and it has not relation to "said selecting includes scoring the question-answer sets to create a distribution of scores and determining the query result based upon variability of the scores" of claim 22. Thus, claim 22 is allowable over the references of record.

F. Claims 23 and 42 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,553,364 to Wu (Wu '364).

The defects of McAndrew '405 undermine the propriety of the §103 rejection of claims 23 and 42 because of its underlying dependence on McAndrew '405. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 23 and 42 are likewise patentable. Besides these grounds, additional reasons provided below separately support patentability of claims 23 and 42.

G. Claims 26 and 43 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,023,670 to Martino et al. (Martino '670).

The faults of McAndrew '405 undercut the propriety of the §103 rejection of claims 26 and 43 because of its underlying dependence on McAndrew '405. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 26 and 43 are likewise patentable. Besides these grounds, additional reasons provided below separately support patentability of claims 26 and 43.

H. Claims 35 and 36 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 6,028,988 to Schultz (Schultz '988).

The faults of McAndrew '405 undercut the propriety of the §103 rejection of claims 35 and 36 because of its underlying dependence on McAndrew '405. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 35 and 36 are likewise patentable. Besides these grounds, additional reasons provided below separately support patentability of claims 35 and 36.

1. Dependent Claims 35

McAndrew '405 as modified by Schultz '988 still fails to disclose, teach, or suggest several features of claim 35, such as “calculating variability of scores from said scoring; and basing the threshold limit on the variability of the scores.” On page 11 of the Final Office Action, it was conceded that “McAndrew '405 does not disclose scoring the questions-answer sets with respect to the question, determining a threshold limit based upon said scoring and selecting the question-answer sets with scores above the threshold limit” but it proposed that Schultz '988 remedied the missing features. While Schultz '988 mention utilizing a “threshold”, it does not describe the dynamic determination of this threshold based upon the variability of the scores in the result set. Rather, the threshold in Schultz '988 is fixed. In contrast, one of the unique aspects of the technique in claim 35 is that the threshold is dynamic – that is, it is not fixed but varies query-by-query based upon the statistics of each individual query. The recited technique is a way of automatically filtering out potential answers that do not meet the threshold criterion. This addresses many problems inherent in a thresholding scheme based upon a fixed score, particularly problems related to choosing an appropriate threshold level for all variety of query lengths. Schultz '988 does not address this problem. For this and other reasons, claim 35 is allowable over the references of record.

I. Claims 37-40 are nonobvious under 35 U.S.C. 103(a) over McAndrew '405 in view of U.S. Patent No. 5,779,549 (Walker '549).

1. Independent Claim 39

In item 12 of both Office Actions, independent claim 39 was “rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew '405 in view of US Pat No 5,779,549 issued to Walker et al (hereafter Walker '549).” In traversal, the Applicants submit that a *prima facie* case of obviousness has not been established because together the cited references fail to disclose all of the features of the invention recited in claim 39. In particular, the cited references, even in combination, fail to disclose or suggest all of the features as recited in independent claim 39. For example, both references fail to disclose “selecting one or more candidate sets from the question-answer sets based on the question from the client computer; creating a reflexive index that includes the question from the client computer and at least the candidate sets; scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score” as recited in claim 39.

As should be appreciated from the discussion above, claim 39 concerns a technique of choosing question-answer sets from a set of candidates by utilizing a reflexive index. The reflexive index includes a question from a client computer and candidate sets of question-answer sets that were selected based on the question. Both the questions from the candidate sets and the question from the client computer are scored against the reflexive index. Candidate sets of question-answers that correlate with the score of the question are chosen. As noted on page 27 of the present application, this technique may help to reduce the number of false positive results

returned by eliminating candidate question-answer sets that do not symmetrically (reflexively) match the question.

Under the “Fifth Examiner Response” section on page 16 of the 11 December 2004 Office Action, it was asserted that the applicants in the 28 November 2003 response were “attacking references individually where the rejections are based on combinations of references.” However, it is respectfully submitted that the applicants in fact were not attacking the cited references individually because both cited references are missing the above-mentioned features recited in claim 39. Specifically, in both Office Actions, it was admitted that “McAndrew ‘405 does not disclose creating a reflexive index that includes the question from the client computer and at least the candidate sets; scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score” as recited in claim 39. From the discussion of Walker ‘549 on pages 15-16 of the 28 November 2003 response, it should be easily appreciated that Walker ‘549 does not remedy the situation because Walker ‘549 likewise does not disclose the features that were admitted to be missing from McAndrew ‘405. Therefore, the Applicants in the 28 November 2003 response were not attacking individually the references cited in both Office Actions.

Although Walker ‘549 uses the term “[r]eflexive” when describing its software at column 13, lines 32-33, that is where the similarities between claim 39 and Walker ‘549 end. About the only commonality between claim 39 and Walker ‘549 is that they use the word “reflexive”, but their use of the word “reflexive” is used in an entirely different context. Walker ‘549 fails to disclose “creating a reflexive index that includes the question from the client computer and at least the candidate sets.” It seems that the “reflexive software” in Walker ‘549 is used to adjust

the difficulty levels of game questions based on the skill level of the player. “[T]he difficulty of subsequent questions is based on the accuracy rate achieved on prior questions.” Walker ‘549, col. 13, lines 35-37. Walker ‘549 fails to describe how, or even if, any type of index is created, let alone if the index includes a received question along with candidate question-answer sets that might answer the received question. Moreover, Walker ‘549 fails to disclose “scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score” in the manner recited in claim 39. As should be appreciated, Walker ‘549 does not score or choose in such a manner. Since both McAndrew ‘405 and Walker ‘549 fail to disclose “selecting one or more candidate sets from the question-answer sets based on the question from the client computer; creating a reflexive index that includes the question from the client computer and at least the candidate sets; scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score”, claim 39 is not rendered obvious in view of these references. For this and other reasons, it is submitted that claim 39 and its dependent claims are in condition for allowance.

2. Dependent Claims 37, 38, and 40

The defects of McAndrew ‘405 and/or Walker ‘549 undermine the propriety of the §103 rejection of claims 37, 38, and 40 because of its underlying dependence on McAndrew ‘405 either alone or in combination with Walker ‘549. Alternatively or additionally, to the extent the respective base claims are held patentable, dependent claims 37, 38, and 40 are likewise

patentable. Besides these grounds, additional reasons provided below separately support patentability of claims 37, 38, and 40.

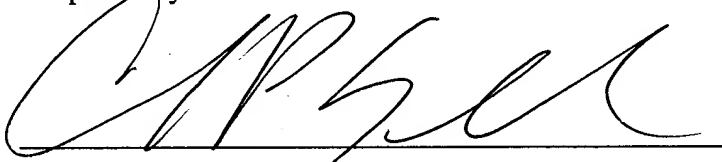
a. Dependent Claims 37 and 38

As should be readily recognized from the previous discussion, the cited references, even in combination, fail to disclose or suggest all of the features as recited in independent claim 37. Both McAndrew '405 and Walker '549 disclose the reflexive index as well as other features recited in claim 37. Thus, claim 37 and its dependent claim 38 are in condition for allowance.

IX. CONCLUSION

The assertion of McAndrew '405 either alone or combination with other references is inherently flawed. McAndrew '405 fails to disclose in detail all of the features recited in the claims, and the remaining cited references fail to remedy the features missing in McAndrew '405. Moreover, further claim-specific reasons result in separate patentability of many of the claims. Therefore, reversal of the rejection by the Appeal Board is hereby requested.

Respectfully Submitted:

A handwritten signature in black ink, appearing to read 'CPS', is written over a horizontal line.

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APPENDIX A

1. (Original): A method, comprising:

operating a knowledge-base system configured to store a database containing answers to questions, the knowledge-base system being operatively coupled to a client computer;

receiving a message from the client computer;

determining the message from the client computer was a reply to a previously generated message from the knowledge-base system; and

forwarding the message from the client computer to a representative in response to said determining.
2. (Original): The method of claim 1, wherein the message from the client computer is an email.
3. (Original): The method of claim 1, further comprising:

enclosing a message identification number on all communications sent by the knowledge-base system; and

wherein said determining includes searching the message from the client computer for the message identification number.
4. (Original): The method of claim 3, wherein said forwarding includes attaching message history information.
5. (Original): The method of claim 1, further comprising:

maintaining a communication log of communications sent and received with the knowledge-base system; and

wherein said determining includes ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.

6. (Original): The method of claim 5, wherein the reply detection limit includes a communication interval limit of time intervals between successive communications with the client computer and a number of communications limits based on a number of communications with the client computer.

7. (Original): The method of claim 5, wherein the communications maintained in the communication log include email communications, web chatting communications, telephone conversations, and personal conversations.

8. (Original): The method of claim 1, wherein the knowledge-base system and the client computer are operatively coupled over a network.

9. (Original): The method of claim 1, further comprising:
enclosing a message identification number on all communications sent by the knowledge-base system;

maintaining a communication log of communications sent and received with the knowledge-base system; and

wherein said determining includes searching the message from the client computer for the message identification number and ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.

10. (Original): The method of claim 1, wherein the representative is a human being.

11. (Original): The method of claim 1, wherein the representative is an automated system.

Claims 12-16 (Canceled).

17. (Original): A method, comprising:

operating a system configured with a database including a plurality of question-answer sets;

receiving a query input to the system, the query input including a word;

selecting one or more of the question-answer sets with the system in response to the query input by evaluating presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question-answer sets; and

providing an output from the system based on said selecting.

18. (Original): The method of claim 17, wherein said evaluating includes weighting the answers more than the questions.

19. (Original): The method of claim 17, wherein said evaluating includes weighting the answers less than the questions.

20. (Original): The method of claim 17, further comprising generating one or more word indices, said selecting including referencing the word indices.

21. (Original): The method of claim 17, wherein said selecting includes scoring a length of one of the questions in proportion to a length of the query input.

22. (Original): The method of claim 17, wherein said selecting includes scoring the question-answer sets to create a distribution of scores and determining the query result based upon variability of the scores.

23. (Original): The method of claim 17, further comprising designating one or more words to ignore.

24. (Original): The method of claim 17, further comprising alerting a representative when a particular one of the question-answer sets is included in the output.

25. (Original): The method of claim 17, further comprising:
designating corresponding weights for the word in the questions and the answers; and

wherein said selecting includes scoring each of the questions and the answers using the corresponding weights.

26. (Original): The method of claim 17, further comprising defining aliases for at least one word.

27. (Original): The method of claim 17, further comprising designating one of the question-answer sets to always appear in the output for the query input.

28. (Original): The method of claim 17, further comprising designating one of the question-answer sets to never appear in the output for the query input.

29. (Original): The method of claim 17, further comprising proportionally weighting one of the question-answer sets to reduce likelihood of appearing in the output for the query input.

30. (Original): The method of claim 17, further comprising proportionally weighting one of the question-answer sets to increase likelihood of appearing in the output for the query input.

31. (Original): The method of claim 17, further adding a question-answer set to the database by email.

32. (Original): The method of claim 17, further comprising:
receiving a message from a client computer coupled to the system;
determining the message from the client computer was a reply to a previously generated message from the system; and
forwarding the message from the client computer to a representative in response to said determining.

33. (Original): The method of claim 32, further comprising:
creating a response message based on the message from the client computer, at least one of a number of response templates and the selected one or more sets, the system being configured to store the response templates each providing a different response format; and
wherein said providing the output includes sending the response message to the client computer.

34. (Original): A method, comprising:
operating a knowledge-base system configured to store a database formatted with a number of question-answer sets, the knowledge-base system being operatively coupled to a client computer;
receiving an input corresponding to a question from the client computer;
scoring the question-answer sets with respect to the question;
determining a threshold limit based upon said scoring; and
selecting the question-answer sets with scores above the threshold limit.

35. (Original): The method of claim 34, wherein said determining includes:
calculating variability of scores from said scoring; and
basing the threshold limit on the variability of the scores.

36. (Original): The method of claim 34, further comprising:
defining an absolute threshold limit that is universally applicable to all received
questions; and
selecting the question-answer sets with scores above the absolute threshold limit.

37. (Original): The method of claim 34, further comprising:
creating a reflexive index that includes the question from the client computer and at least
the selected question-answer sets from said selecting;
scoring each question from the selected question-answer sets against the reflexive index;
scoring the question from the client against the reflexive index to generate a question
score; and
choosing the selected question-answer sets with scores that favorably correlate with the
question score.

38. (Original): The method of claim 37, wherein the reflexive index further includes
all of the question-answer sets.

39. (Original): A method, comprising:

- operating a knowledge-base system configured to store a database formatted with a number of question-answer sets, the knowledge-base system being operatively coupled to a client computer;
- receiving an input corresponding to a question from the client computer;
- selecting one or more candidate sets from the question-answer sets based on the question from the client computer;
- creating a reflexive index that includes the question from the client computer and at least the candidate sets;
- scoring each question from the candidate sets against the reflexive index;
- scoring the question from the client against the reflexive index to generate a question score; and
- choosing the candidate sets with scores that correlate with the question score.

40. (Original): The method of claim 39, wherein the reflexive index further includes all of the question-answer sets.

41. (Original): A system comprising:

- means for determining a message from a client computer was a reply to a previously generated message from a FAQ database and forwarding the message to a representative in response;
- means for evaluating question components and answer components of the FAQ database independently relative to an input query; and

means for providing a response to the FAQ database query in accordance with one or more response templates, the response templates each relating to a different response format.

42. (Original): The system of claim 41, further comprising means for selectively hiding or ignoring words included in one or more question-answer entries of the FAQ database.

43. (Original): The system of claim 41, further comprising means for providing an alias designation.

Claim 44 (Canceled).

45. (Previously presented): The method of claim 1, further comprising:
wherein the previously generated message includes an answer to a question from the client computer;
sending the answer from the knowledge-base system to the client computer before said receiving the message from the client computer.